Mr. James E. Webb Administrator

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

before the
Subcommittee on Independent Offices
Committee on Appropriations
House of Representatives

August 19, 1963

Mr. Chairman and Members of the Subcommittee:

We certainly appreciate the opportunity to be here today and discuss with you NASA's request for appropriations for Fiscal Year 1964. As you know, the House passed NASA's Authorization Bill, 1964, on August 1, after the House Committee on Science and Astronautics took close to 4,000 pages of printed testimony. On August 9, the Senate approved H.R. 7500. The total budget request of NASA was for \$5,712,000,000, of which \$4,912,000,000 was for research, development and operation and \$800,000,000 was for construction of facilities. The House of Representatives approved a total authorization of \$5,203,719,400, and the Senate approved a total authorization of \$5,511,520,400.

Mr. Chairman, five years ago it was clear to this Nation that the orbiting of a first man-made satellite, Sputnik I, by the Russians laid down a challenge to this Nation. As in

all such matters we entered into a debate, Congress considered measures and established the National Aeronautics and Space Administration. Within these five short years, NASA has brought about a rapid build up of our national competence in space. I believe that despite the urgent nature of this build up, despite the fact that progress in space requires difficult steps to be taken across the technological frontier, NASA has established an impressive record of success. Six astronauts in Project Mercury were sent into space and returned safely. Each completed successfully the missions from an engineering and scientific standpoint. I need not stress the record established in Project Mercury. It was a successful effort by the Government-industryand university team; and this effort proved the soundness of the United States approach to manned space flight. The successful completion of Project Mercury justifies, we believe, the Congress to support the next steps in the national effort to achieve pre-eminence in manned space flight.

The program includes a family of eleven space boosters starting with the Scout; running through the Thor Delta, of which we have had nineteen successful launches out of the last twenty and the one that failed was the first, back in 1960; moving through the Atlas, Titan, Atlas-Agena which will put 8,500 pounds in orbit as against 150 pounds for the Scout;

moving on to the Titan III, which will place approximately 30,000 pounds in orbit, and to the Saturn V, the really large booster which can put 220,000 to 240,000 pounds into a low earth orbit, approximately a hundred tons. When we move to the Saturn V, we obtain the ability to maneuver in space. If large objects are to be placed into space for military or other purposes of this Nation, and we do know that the Russians have threatened to consider putting very large bombs in orbit, it takes this kind of a rocket to do it. We have no evidence on which we can rely that the Russians are building such a rocket as this. The largest rocket they have flown up to date can put something like 15,000 pounds into a low earth orbit.

The Saturn I, of which we have had four successful flights of the first stage, will be flown again this year with a live second stage. This will put about nineteen thousand pounds into orbit this year, which will be beyond anything that the Russians have put into space in terms of weight. While this is a flight to develop the vehicle and not a working payload, it does illustrate the growing ability to use space and to place large weights into space.

I should like to point out that every one of the seven scientific satellites NASA has launched in 1962 and 1963 has gone into orbit and has satisfactorily performed its mission.

The Relay and the two Telstar communications satellites were successful. Relay is still operating and to date 1,390 experiments and 64 TV demonstrations have been conducted successfully with Relay. The Tiros weather satellite score is seven successes, no failures. Syncom II, launched July 26, was completely successful and is operating excellently as we sit here. The highly successful Mariner II is considered the world's first successful mission in the field of planetary exploration by spacecraft and has increased the knowledge of Planet Venus to an extraordinary degree.

I should like to say a word about the contribution of the NASA to national defense. Our program calls for the building of large boosters for performing the space science work necessary to define the space environment accurately, for building the manned and unmanned families of spacecraft, for developing the competence of the operating crews and the worldwide tracking and data acquisition network, for placing into operation the large booster assembly and test complex at Michoud and the Mississippi Test Facility, for building the Manned Spacecraft Center and Integrated Mission Control Center at Houston, and for building the large Merritt Island Launch Operations Center at Cape Canaveral. All of these ground installations can in time of need be converted to or can be utilized to handle military requirements. These are the only large scale assembly,

test, and launch facilities in the Nation for large boosters. Their existence and their basic value for military operations is an important element in our national strength. These could become indispensable elements of military power. One of the most difficult problems which both science and technology are required to solve is the use of energy in space for the maneuver of space vehicles to inspect or take action related to hostile objects in space. With the Vostok, the Russians are ahead in manned space flight. However, the Gemini and Apollo systems will give the United States the basic capability to operate with men over extended periods, to learn how to use the energy in space to maneuver, to rendezvous and dock, all of these requirements basic to any ability to intercept and examine hostile spacecraft. We estimate that seventy-five to eighty percent of the cost of the Apollo program will be devoted to the development of a capability for conducting near earth orbit operations which could form a basis for any military system we may require. work which NASA has done with weather satellites and communications satellites gives us a foundation of knowledge, proven through experimental operations which could form the basis for decisions in the area of space communications for military uses. No other experience of a comparable nature exists anywhere else in this or any other Government.

It may be pertinent to quote General Thomas S. Power,

Commander in Chief of the Strategic Air Command, in a speech
at the Second Manned Space Flight Meeting in Dallas on April 24,

1963. He said, "We must continue our intensive, non-military
effort along the entire spectrum of space and space related
sciences. The primary responsibility for this effort rests with
the National Aeronautics and Space Administration. Its close
cooperation with the Department of Defense will not only further
its own objective of the peaceful conquest of space, but also
help create the building blocks for the future military system
which may be required to repeat President Kennedy's words,

'to make sure that space is maintained for peaceful purposes.'"

Mr. Chairman, I urge that your Committee approve the total amount of appropriations authorized. I should like to point out that even if the full amount requested by the President were authorized and appropriated, we face in these funds and in the plants of the contractors a similar situation to that with our own Centers where they requested 2,000 more people than we were able to approve under the budget restriction. In our manned space program we will be short between one hundred and two hundred million dollars out of the three billion dollars requested by the President. We are prepared to operate with a tight belt, we are prepared to operate without contingencies. However, I do want to point out to the Committee that we are still going to have a serious problem if we encounter any major

difficulties in the form of a catastrophe on the launching pad or with a test station.

I should also like to say to the Committee that after the Authorization Bill has been enacted and after the Appropriations Bill has been passed, we are going to prepare an over-all operating plan. We plan to show it to both the House and Senate Space Committees and we will be happy to show it to the Appropriations Committees. With this re-examination and the basis for committing the funds actually appropriated, we will be in a position where we will know what our situation is and whether we will have to ask for a supplemental appropriation.

In addition to Dr. Dryden and Dr. Seamans and the Program Managers, we are happy to have with us this morning the Center Directors and their principal assistants, as you requested, to answer your questions. Thank you.